

WHAT IS CLAIMED IS:

1. A medical perfusion system comprising:
a plurality of perfusion devices;
a communications bus connecting each of said plurality of perfusion devices;
5 and
means for broadcasting a message to a first one of the perfusion devices,
wherein the message contains a data portion which identifies the message as being
one of a number of predefined message types.
2. The medical perfusion system of claim 1, wherein the data portion defines a
10 priority level for the message based on message type.
3. The medical perfusion system of claim 2, wherein the data portion defines a
priority level for the message based on the first perfusion device.
4. The medical perfusion system of claim 2, wherein the data portion defines a
15 priority level for the message based on a network address associated with the first
perfusion device.
5. The medical perfusion system of claim 1, wherein the data portion identifies
the message as containing configuration data associated with the first perfusion
device.
6. The medical perfusion system of claim 1, wherein the data portion identifies
20 the message as a trigger, and wherein the first perfusion device comprises:
means for taking a predefined action in response to a particular event
associated with the trigger.

7. The medical perfusion system of claim 1, wherein the data portion identifies the message as a servo message which contains feedback data for the first perfusion device, and wherein the first perfusion device comprises:
means for adjusting its output as a function of the feedback data.

5 8. The medical perfusion system of claim 1 further comprising a network controller, wherein the message is broadcast from a second perfusion device when the network controller is unavailable.

9. A medical perfusion system comprising:
a plurality of perfusion devices;
10 a communications bus connecting each of said plurality of perfusion devices;
and
means for broadcasting a message from a first one of the plurality of perfusion devices, wherein the message contains a data portion which identifies the message as being one of a number of predefined message types.

15 10. The medical perfusion system of claim 9, wherein the data portion defines a priority level for the message based on message type.

11. The medical perfusion system of claim 10, wherein the data portion defines a priority level for the message based on the first perfusion device.

20 12. The medical perfusion system of claim 10, wherein the data portion defines a priority level for the message based on a network address associated with the first perfusion device.

13. The medical perfusion system of claim 10, wherein the data portion identifies the message as containing configuration data associated with a second one of the plurality of perfusion devices.

14. The medical perfusion system of claim 10, wherein the data portion identifies the message as a trigger, and wherein a second one of the plurality of perfusion devices comprises:

means for taking a predefined action in response to a particular event associated with the trigger.

15. The medical perfusion system of claim 10, wherein the data portion identifies the message as a servo message which contains feedback data for a second one of the plurality of perfusion devices, wherein the second perfusion device comprises:

means for adjusting its output as a function of the feedback data.

16. The medical perfusion system of claim 10 further comprising a network controller, wherein the message is broadcast to a second one of the plurality of perfusion devices when the network controller is unavailable.

17. A medical perfusion system comprising:

a plurality of perfusion devices;

a communications bus connecting each of said plurality of perfusion devices;

and

means for broadcasting a message to a first one of the perfusion devices, said message including a data portion which contains configuration data associated with the first perfusion device.

18. The medical perfusion system of claim 17, wherein the configuration data defines how the first perfusion device is to be utilized during any one of a number of different medical procedures.

5 19. The medical perfusion system of claim 18, wherein the configuration data establishes a feedback link between the first perfusion device and a second one of the plurality of perfusion devices.

20. The medical perfusion system of claim 19, wherein the second perfusion device is a sensing device.

10 21. The medical perfusion system of claim 20, wherein the first perfusion device comprises:

means for storing the configuration data, and wherein the configuration data includes a network address associated with the sensing device.

22. The medical perfusion system of claim 20 further comprising an adaptor pod associated with the first perfusion device, wherein said adaptor pod comprises:

15 means for storing the configuration data, wherein the configuration data includes a network address associated with the sensing device.

20 23. The medical perfusion system of claim 18, wherein the configuration data establishes a trigger link between the first perfusion device and a second one of the plurality of perfusion devices, wherein the configuration data establishes the first perfusion device as a trigger respondent and the second perfusion device as a trigger source.

24. The medical perfusion system of claim 23, wherein the first perfusion device comprises:

means for storing the configuration data, wherein the configuration data includes a network address associated with the trigger source.

25. The medical perfusion system of claim 23 further comprising an adaptor pod associated with the first perfusion device, wherein said adaptor pod comprises:

5 means for storing the configuration data, wherein the configuration data includes a network address associated with the trigger source.

26. The medical perfusion system of claim 17 further comprising a network controller, wherein the message is broadcast by a second one of the plurality of perfusion devices when the network controller is unavailable.

10 27. A medical perfusion system comprising:

a plurality of perfusion devices, wherein one of the plurality of perfusion devices is a sensing device and a second one of the plurality of perfusion devices is a responding device; and

15 a communications bus connecting each of said plurality of perfusion devices, wherein the sensing device has associated therewith means for broadcasting a message having a data portion which contains feedback data for controlling the operation of the responding device.

28. The medical perfusion system of claim 27, wherein the sensing device comprises:

20 means for measuring a desired parameter, wherein the feedback data represents a measurement of the desired parameter.

29. The medical perfusion system of claim 28, wherein the message contains a network address associated with the sensing device.

30. The medical perfusion system of claim 27, wherein the respondent device comprises:

means for accepting the message from the sensing device;

means for processing the message; and

5 means for responding to the message.

31. The medical perfusion system of claim 30, wherein said means for accepting the message from the sensing device comprises:

an acceptance filter for storing information that configures the respondent device to accept the message from the sensing device.

10 32. The medical perfusion system of claim 31, wherein the acceptance filter information includes a network address associated with the sensing device.

33. The medical perfusion system of claim 31, wherein the acceptance filter information includes a value which identifies the message as a servo messages.

15 34. The medical perfusion system of claim 27 further comprising an adaptor pod associated with the respondent device, wherein said adaptor pod comprises:

means for accepting the message from the sensing device;

means for processing the message; and

means for responding to the message.

20 35. The medical perfusion system of claim 34, wherein said means for accepting the message from the sensing device comprises:

an acceptance filter for storing information that configures the respondent device to accept the message from the sensing device.

36. A medical perfusion system comprising:

a plurality of perfusion devices, wherein one of the plurality of perfusion devices is a trigger source and a second one of the plurality of perfusion devices is a trigger respondent; and

5 a communications bus connecting each of said plurality of perfusion devices, wherein the trigger source includes means for broadcasting a message having a data portion which alerts the trigger respondent to the existence of a particular condition.

37. The medical perfusion system of claim 36, wherein the trigger respondent comprises:

10 means for accepting the message from the trigger source; and
means for responding to the message from the trigger source.

38. The medical perfusion system of claim 37, wherein said means for accepting the message from the trigger source comprises:

15 an acceptance filter for storing information that configures the trigger respondent to accept the message from the trigger source.

39. The medical perfusion system of claim 38, wherein the stored information includes a network address associated with the trigger source.

40. The medical perfusion system of claim 38, wherein the stored information includes a value that is exclusively associated with trigger messages.

20 41. The medical perfusion system of claim 37, wherein said means for responding to the message from the trigger source comprises:

means for taking a predefined action in response to the existence of the particular condition.

means for accepting the message from the trigger source; and
means for responding to the message from the trigger source.

an acceptance filter for storing information that configures the trigger respondent to accept the message from the trigger source.